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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/755,884 | 01/05/2001 | Christoph Lodde | 44815/251563 | 4102 |
| 7590 | 04/14/2005 | | | EXAMINER |
| Roger T. Frost, Esq. Merchant & Gould, LLC 3200 IDS Center 80 South 80th Street Minneapolis, MN 55402-2215 | | | CHANG, VICTOR S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1771 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/755,884 | LODDE, CHRISTOPH | |
| | Examiner | Art Unit | |
| | Victor S. Chang | 1771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 January 2005 and 02 March 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3 and 5-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-3 and 5-10 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. _____
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 3/2/2005 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

Introduction

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 1/3/2005. Applicants' amendments to claim 1, and new claim 10 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

Rejections Based on Prior Art

4. Claims 1-3, 5-8 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mamish (US 5227225), generally as set forth in section 5 of Office action dated 9/29/2004, together with the following additional reasoning and response to argument.

For the purpose of clarification, the Examiner restates the relied upon prior art as follows: Mamish's invention is directed to methods for preparing masking tapes by coating a thin layer of a polyolefinic material onto a lightweight nonwoven cloth and then applying a layer of adhesive onto the opposed surface of the nonwoven cloth (Abstract). Mamish teaches that the coated polyolefinic backing layer will both coat the surface of the cloth and invade its interstices, so that the nonwoven cloth may be said to be "embedded" (impregnated) (column 1, lines 56-61). Additionally, the polyolefin backing

layer of the masking tape acts as a sealant to the discontinuous nonwoven surface and serves as a barrier layer against adhesive migration (column 1, lines 65-67).

It is noted that claim 1 has been amended to recite *inter alia* "... so as to imbue the nonwoven fiber material with the thermoplastic resin ...".

With respect to Applicant's argument "[t]he transitional phrase "consisting of" excludes any element ... not specified in the claim ... *Mamish* discloses a masking tape consisting essentially of four distinct layers, namely, an outer layer of high density polyethylene, an inner layer of low density polyethylene, a nonwoven cloth, and a pressure-sensitive adhesive layer." (Remarks, page 5, first paragraph), the Examiner notes that Applicant's argument is ~~clearly~~ directed to one of the embodiments taught by Mamish, it must be noted that Mamish's teaching is not limited by the above-mentioned embodiment. Specifically, the Examiner repeats that Mamish teaches methods for preparing masking tapes by coating a thin layer of a polyolefinic material onto a lightweight nonwoven cloth and then applying a layer of adhesive onto the opposed surface of the nonwoven cloth, as set forth above. In particular, Mamish shows in Table 1 that each of examples 1-4 has a single layer of LDPE coating. As such, Mamish's teaching include a single layer coating of thermoplastic resin as well, and the transitional phrase "consisting of" still fails to exclude Mamish's teachings, Applicant's argument to the contrary notwithstanding.

With respect to Applicant's argument "although *Mamish* asserts at column 1, lines 56 and 57 "that the nonwoven is not present as a discrete layer", that is contradicted by his unequivocal disclosure that the polyolefinic backing layer ... coats

the surface of the nonwoven cloth" as well as being mechanically bonded or laminated thereto" (column 1, lines 61-62). In other words, the cloth and the two-layer backing are individual layers mechanically attached to each other." (Remarks, page 5, first paragraph), the Examiner respectfully notes that Applicant appears to take Mamish's teachings in piecemeal and out of context. It should be noted that a complete reading of Mamish's teaching at column 1, lines 56-61 is as follows: "It will of course be appreciated that the nonwoven is not present as a discrete layer. Rather, the coated polyolefinic backing layer will both coat the surface of the cloth and invade its interstices, so that the cloth may be said to be "embedded" in the backing layer as well as being mechanically bonded or laminated thereto." As such, Mamish clearly teaches a coating of polyolefin onto the surface while at the same time the coating invades the interstices (i.e., impregnates) of the cloth. In other words, the cloth and the backing layer are not individual layers, Applicant's argument to the contrary notwithstanding.

With respect to newly amended claim 1, Applicant's argument "the nonwoven fiber material is impregnated by dipping or spraying with the thermoplastic resin so as to imbue the nonwoven fiber material with the thermoplastic resin ... Support for the term "to imbue" is found from the technical meaning of the German word "impragnierung" in the original German text filed with the present application ... A German synonym for "impragnierung" is "trankung" ... which means "to imbue", "to saturate", "to water" ... these definition do not include "to coat", the step used by *Mamish* to apply his two-layer backing onto the nonwoven material. Thus, although the ... backing in *Mamish* ... may invade the interstices of a cloth, that *disclosed* backing does not impregnate the

nonwoven fiber material and does not imbue the nonwoven fiber material with the thermoplastic resin" (Remarks, page 7), the Examiner notes that while the amendment appears to provide additional information regarding the process, nonetheless, it must be noted again (see Office action dated 9/29/2004, page 7) that since the scope of the term "imbue" or "impregnation" has not been redefined in the specification, the recitation in claim 1 fails to preclude Mamish's teaching, and Examiner again suggests that the exact scope of the term "imbue" or "impregnate" of the instant invention, expressed in terms of specific structural features imparted by such a process, must be incorporated into claim 1, so as to establish a clear and distinctive patentable feature of the instant invention. As such, in the absence of any distinct structural feature imparted by imbuing the nonwoven with a thermoplastic, the Examiner repeats that the product-by-process limitations "impregnated by dipping or spraying a thermoplastic resin ... to imbue ..." still fail to preclude the teachings of Mamish. In other words, Mamish's teachings either anticipates, or renders *prima facie* obvious the instant invention as claimed, Applicant's argument to the contrary notwithstanding.

For Applicant's previous argument that a coating resin with the basis weight of one to five g/m² would not be sufficient for embedding the light-weight nonwoven of Mamish, and cannot be applied by the coextrusion process described by Mamish, it is noted that Applicant has now submitted EP 0 252 388 as an evidence, and argues that EP '388 describes the difficulties in producing barrier layers with reduced thickness. However, the Examiner notes that EP '388 appears to be directed to the thickness limitation of a thin coating, and there is nothing related to argument that when the basis

weight of one to five g/m², it would not be sufficient for embedding the light-weight nonwoven. As such, the Examiner notes that the EP '388 reference appears to be irrelevant to the above-mentioned argument.

Similarly, both the German-language document, entitled "Schichtdicke exakt steuern" and dated 10/21/2003, and the Chinese patent CN 1344616 also appear to be thickness issue related documents, and irrelevant to the above-mentioned basis-weight related argument.

With respect to Applicant's argument "The minimum layer thickness disclosed by Mamish is 1.5 mils (38.1 µm) ... one can compare the minimum layer thickness of 38.1 µm disclosed by Mamish to the aforementioned prior-art layer limit of about 10 µm. Using the density values according to *Mamish*, one can calculate a limiting specific weight of 9.58 g/m², which cannot be fallen below according to *Mamish*. The present invention claims a basis weight of impregnation of 1-5 g/m², which is less than 52% of the value calculated for *Mamish*." (Remarks, page 8-9, bridging paragraph), the Examiner notes that, first, while Mamish expressly teaches a preferable thickness range for a two-layered backing is about 1.5-2.0 mils, nowhere does Mamish expressly teach a minimum thickness. Second, it is unclear to the Examiner how a basis weight of 9.58 g/m² is calculated. Third, even if the calculation is proper, it noted that the corresponding thickness is approximately four times greater than the limit of coating thickness, i.e., 10 µm. As such, the Examiner notes that the teachings of prior actually appear to support the feasibility of a thinner coating which is well within the instantly claimed basis weight of 1-5 g/m², and renders Applicant's argument invalid.

Finally, for new independent claim 10, the Examiner notes that while its transitional phrase is "consisting of", since it claims the same elements and limitations as claims 1-3 and 5-8, and Mamish also teaches a single layer coating, it is also rejected for the reasons as set forth above.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mamish (US 5227225) in view of Hansen et al. (US 4133731), generally as set forth in section 6 of Office action dated 9/29/2004, together with the additional reasoning as set forth above.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VSc

Victor S Chang
Examiner
Art Unit 1771

4/5/2005



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